

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (canceled).

2. (currently amended): A matrix calculator for performing multiplication on a first matrix and a second matrix, comprising:

an element selecting portion being inputted with elements of the first and the second matrices, the element selecting portion for selecting sequentially each element consisting sub-element of each element of result matrix achieved by the multiplication, among the inputted elements of the first and second matrices, and for outputting the selected element sequentially;

a calculating portion for sequentially calculating each element of the result matrix by sequentially adding multiplied value of outputs from the element selecting portion;

a storing portion for storing output from the calculating portion; and

a control signal generating portion for generating a control signal that controls a timing of operation of the calculating portion and the storing portion.

~~The matrix calculator of claim 1,~~ wherein the element selecting portion comprises:

a multiplexer being inputted with the respective elements of the first and the second matrices in parallel; and

a control block for generating a selection signal that selects an output from the multiplexer.

3. (original): The matrix calculator of claim 2, wherein the calculating portion comprises:

- a multiplier for multiplying the output from the multiplexer;
- a first memory for temporarily storing output from the multiplier;
- a second memory; and
- an adder for adding a value stored in the first memory with a value stored in the second memory, and inputting the resultant value of adding into the second memory.

4. (original): The matrix calculator of claim 3, wherein the control signal generating portion comprises a plurality of flip-flops for generating signals that delay signals output from the control block by a predetermined number of clocks, respectively, and then input the generated signals into the calculating portion and the storing portion.

5. (original): The matrix calculator of claim 4, wherein the storing portion comprises a plurality of registers for sequentially storing the output from the calculating portion.